FULBRIGHT & JAWORSKI L.L.P.
A REGISTERED LIMITED LIABILITY PARTNERSHIP
600 CONGRESS AVENUE, SUITE 2400
AUSTIN, TEXAS 78701-3271
WWW.FULBRIGHT.COM

RHANSON@FULBRIGHT.COM
DIRECT DIAL: (512) 536-3085

TELEPHONE: (512) 474-5201
FACSIMILE: (512) 536-4598

April 29, 2004

VIA FACSIMILE (703) 746-4570

Attn: Mr. Donald S. Fairchild
Office of Patent Publications
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Re: *SN 09/885,723 "TRANSGENIC PLANTS CONTAINING ALTERED LEVELS OF STEROID COMPOUNDS" – Balasulojini Karunanandaa, et al.*
Our Ref. MONS:018US; Client Ref. 51906-US 01

Dear Sir:

Applicants received a call from the Office of Patent Publications indicating that Table 5 on page 59 of the referenced patent application included data that was cut off in the right hand margin. Applicants were requested to provide a version of the Table suitable for publication.

Therefore, Applicants have provided herewith one marked copy and one clean copy of Table 5 in which the data on the right hand side that was partially incomplete has been deleted. The deleted information is not necessary for an understanding of the Table or the claims generally, as the corresponding amino acid sequences are shown in the alignment in Figure 32, and the corresponding organisms are given on the left hand side of the Table.

The Office is invited to contact the undersigned with any questions regarding this matter.

Respectfully submitted,

Robert E. Hanson
Reg. No. 42,628

REH/vv
Enclosure

25410066.1 / 10210131

Table 5. Sources of Sequences Used In Building The Multiple Alignment

methanobac	swissprot:hmdh_metth	Begin:1	End:397	O26662 methanobacterium thermoautotrophicur
methanococ	swissprot:hmdh_metja	Begin:1	End:405	Q58116 methanococcaus jannaschii, 3-hydroxy-3
halobacter	swissprot:hmdh_halvo	Begin:1	End:403	Q59468 halobacterium volcanii (haloferax volcar
sulfolobus	swissprot:hmdh_sulso	Begin:1	End:409	O08424 sulfolobus solfataricus, 3-hydroxy-3-me
yeast2	gp_pln1:yschmgcr2_1	Begin:1	End:1045	M22255 Saccharomyces cerevisiae Yeast HMG
yeast1	gp_pln1:yschmgcr1_1	Begin:1	End:1054	M22002 Saccharomyces cerevisiae Yeast HMG
phycomyces	swissprot:hmdh_phybl	Begin:1	End:105	Q12649 phycomyces blakesleeanus, 3-hydroxy-
fusarium	swissprot:hmdh_fusmo	Begin:1	End:976	Q12577 fusarium moniliforme (gibberella fujikure
candida	gp_pln1:ab012603_1	Begin:1	End:934	AB012603 Candida utilis Candida utilis HMG-m
dictyoste2	swissprot:hmd2_dicdi	Begin:1	End:481	P34136 dictyostelium discoideum (slime mold), :
wheat1	pir2:pq0761	Begin:1	End:150	hydroxymethylglutaryl-CoA reductase (NADPH)
rice	swissprot:hmdh_orysa	Begin:1	End:509	P48019 oryza sativa (rice), 3-hydroxy-3-methylg
corn	sp_plant:q24594	Begin:1	End:579	O24594 zea mays (maize), 3-hydroxy-3-methylg
wheat3	pir2:pq0763	Begin:1	End:150	hydroxymethylglutaryl-CoA reductase (NADPH)
wheat2	pir2:pq0762	Begin:1	End:150	hydroxymethylglutaryl-CoA reductase (NADPH)
soybean	gmtx6:30820_1r59f1	Begin:101	End:259	from proprietary soy sequence database
rubbertre3	swissprot:hmd3_hevbr	Begin:1	End:586	Q00583 hevea brasiliensis (para rubber tree), 3-
rosyperiwl	swissprot:hmdh_catro	Begin:1	End:601	Q03163 catharanthus roseus (rosy periwinkle) (r
tomato	swissprot:hmd2_lyces	Begin:1	End:602	P48022 lycopersicon esculentum (tomato), 3-hy
woodtobacc	swissprot:hmdh_nicsy	Begin:1	End:604	Q01559 nicotiana sylvestris (wood tobacco), 3-h
potato	gp_pln1:pothmgri_1	Begin:1	End:596	L01400 Solanum tuberosum Potato hydroxymeth
radish	sp_plant:q43826	Begin:1	End:573	Q43826 raphanus sativus (radish), hydroxymeth
arabadopsis1	gp_pln1:athhmgcoar_1	Begin:1	End:592	L19261 Arabidopsis thaliana Arabidopsis thalian
cucumismel	gp_pln1:ab021862_1	Begin:1	End:587	AB021862 Cucumis melo Cucumis melo mRNA
rubbertre2	swissprot:hmd2_hevbr	Begin:1	End:210	P29058 hevea brasiliensis (para rubber tree), 3-h
rubbertre1	swissprot:hmd1_hevbr	Begin:1	End:575	P29057 hevea brasiliensis (para rubber tree), 3-h
camptothec	swissprot:hmdh_camac	Begin:1	End:593	P48021 camptotheca acuminata, 3-hydroxy-3-m
arabadops2	swissprot:hmd2_arath	Begin:1	End:562	P43256 arabidopsis thaliana (mouse-ear cress),
chineseham	swissprot:hmdh_crigr	Begin:1	End:887	P00347 cricetulus griseus (chinese hamster), 3-h
chineseha2	gp_rod:cruhmg14_1	Begin:1	End:887	L00183 Cricetulus sp. Hamster 3-hydroxy-3-met
syrianhamst	gp_rod:hamhmgcob_1	Begin:1	End:887	M12705 Mesocricetus auratus Syrian hamster 3-
rat	swissprot:hmdh_rat	Begin:1	End:887	P51639 rattus norvegicus (rat), 3-hydroxy-3-met
rabbit	swissprot:hmdh_rabit	Begin:1	End:888	Q29512 oryctolagus cuniculus (rabbit), 3-hydrox
human	gp_pri2:humhmgcoa_1	Begin:1	End:886	M11058 Homo sapiens Human 3-hydroxy-3-met
mouse	gp_rod:mushmgcoa_1	Begin:1	End:224	M62766 Mus musculus Mouse HMG-CoA reduc
xenopus	swissprot:hmdh_xenla	Begin:1	End:883	P20715 xenopus laevis (african clawed frog), 3-h
seaurchin	swissprot:hmdh_strpu	Begin:1	End:932	P16393 strongylocentrotus purpuratus (purple-s
cockroach	swissprot:hmdh_blage	Begin:1	End:856	P54960 blattella germanica (german cockroach)
drosophila	swissprot:hmdh_drome	Begin:1	End:916	P14773 drosophila melanogaster (fruit fly), 3-hy
dictyoste1	swissprot:hmd1_dicdi	Begin:1	End:552	P34135 dictyostelium discoideum (slime mold), :
schistosom	swissprot:hmdh_schma	Begin:1	End:948	P16237 schistosoma mansoni (blood fluke), 3-h
archaeoglo	swissprot:hmdh_arcfu	Begin:1	End:436	O28538 archaeoglobus fulgidus, 3-hydroxy-3-me
pseudomonas	gp_bct1:psehmgcoa_1	Begin:1	End:428	M24015 Pseudomonas mevalonii P.mevalonii HI

These sequences, and their truncated counterparts, are useful in the present invention. Examples of such preferred HMG CoA reductases include the truncated rubber and *Arabidopsis* HMG CoA reductases disclosed herein.

Other enzyme-encoding DNAs can be introduced into plants to elevate even further the levels of desirable Δ5 sterols and their reduced stanol counterparts as well as other phytosterols and tocopherols. Thus, the

Table 5. Sources of Sequences Used In Building The Multiple Alignment

methanobac	swissprot:hmdh_metth	Begin:1	End:397	O26662
methanococ	swissprot:hmdh_metja	Begin:1	End:405	Q58116
halobacter	swissprot:hmdh_halvo	Begin:1	End:403	Q59468
sulfolobus	swissprot:hmdh_sulso	Begin:1	End:409	O08424
yeast2	gp_pln1:yschmgcr2_1	Begin:1	End:1045	M22255
yeast1	gp_pln1:yschmgcr1_1	Begin:1	End:1054	M22002
phycomyces	swissprot:hmdh_phybl	Begin:1	End:105	Q12649
fusarium	swissprot:hmdh_fusmo	Begin:1	End:976	Q12577
candida	gp_pln1:ab012603_1	Begin:1	End:934	AB012603
dictyoste2	swissprot:hmd2_dicdi	Begin:1	End:481	P34136
wheat1	pir2:pq0761	Begin:1	End:150	hydroxymethylglutaryl-CoA reductase (NADPH)
rice	swissprot:hmdh_orysa	Begin:1	End:509	P48019
corn	sp_plant:o24594	Begin:1	End:579	O24594
wheat3	pir2:pq0763	Begin:1	End:150	hydroxymethylglutaryl-CoA reductase (NADPH)
wheat2	pir2:pq0762	Begin:1	End:150	hydroxymethylglutaryl-CoA reductase (NADPH)
soybean	gmtx8:30820_1r59f1	Begin:101	End:259	from proprietary soy sequence database
rubbertre3	swissprot:hmd3_hevbr	Begin:1	End:586	Q00583
rosyperiwi	swissprot:hmdh_catro	Begin:1	End:601	Q03163
tomato	swissprot:hmd2_lyces	Begin:1	End:602	P48022
woodtobacc	swissprot:hmdh_nicsy	Begin:1	End:604	Q01559
potato	gp_pln1:pothmgri_1	Begin:1	End:596	L01400
radish	sp_plant:q43826	Begin:1	End:573	Q43826
arabadopsis1	gp_pln1:athhmgcoar_1	Begin:1	End:592	L19261
cucumismel	gp_pln1:ab021862_1	Begin:1	End:587	AB021862
rubbertre2	swissprot:hmd2_hevbr	Begin:1	End:210	P29058
rubbertre1	swissprot:hmd1_hevbr	Begin:1	End:575	P29057
camptothec	swissprot:hmdh_camac	Begin:1	End:593	P48021
arabadops2	swissprot:hmd2_arath	Begin:1	End:582	P43256
chineseham	swissprot:hmdh_crigr	Begin:1	End:887	P00347
chineseha2	gp_rod:cruhmg14_1	Begin:1	End:887	L00183
syrianhamst	gp_rod:hamhmgcob_1	Begin:1	End:887	M12705
rat	swissprot:hmdh_rat	Begin:1	End:887	P51639
rabbit	swissprot:hmdh_rabit	Begin:1	End:888	Q29512
human	gp_pri2:humhmgcoa_1	Begin:1	End:888	M11058
mouse	gp_rod:mushmgcoa_1	Begin:1	End:224	M62766
xenopus	swissprot:hmdh_xenla	Begin:1	End:883	P20715
seaurchin	swissprot:hmdh_strpu	Begin:1	End:932	P16393
cockroach	swissprot:hmdh_blage	Begin:1	End:856	P54960
drosophila	swissprot:hmdh_drome	Begin:1	End:916	P14773
dictyoste1	swissprot:hmd1_dicdi	Begin:1	End:552	P34135
schistosom	swissprot:hmdh_schma	Begin:1	End:948	P16237
archaeoglo	swissprot:hmdh_arcfu	Begin:1	End:436	O28538
pseudomonas	gp_bct1:psehmgcoa_1	Begin:1	End:428	M24015

These sequences, and their truncated counterparts, are useful in the present invention. Examples of such preferred HMG CoA reductases include the truncated rubber and *Arabidopsis* HMG CoA reductases disclosed herein.

Other enzyme-encoding DNAs can be introduced into plants to elevate even further the levels of desirable Δ5 sterols and their reduced stanol counterparts as well as other phytosterols and tocopherols. Thus, the